

Grid Code Consultation B/07 – “Improved Planning Code Data Exchange for Compliance Assessments”

Review of Legal Text following Industry Responses

A Paper by National Grid

Background

Grid Code consultation B/07 “Improved Planning Code Data Exchange for Compliance Assessments” was circulated for industry consideration and comment on 15th March 2007. A total of 10 non-confidential responses were received (there were no confidential responses) from parties. A list of respondents is attached at Appendix A to this paper.

Based upon the comments received National Grid believes that a number of improvements to the process can be realised and the purpose of this paper is to set out these improvements and the rationale that underlies them.

Overview of Changes

The most significant changes to the legal text fall into the following three areas:

- Definition of a Transmission Interface Circuit
- Process for establishing Maintenance Periods
- Clarification of the Planning Liaison Process (PC.7)

A number of respondents raised significant queries regarding the above mechanisms and as such National Grid believe that it would be appropriate to make amendments to the legal text that formed the basis of the consultation.

Definition of a Transmission Interface Circuit

The definition of a Transmission Interface Circuit proposed in Grid Code consultation B/07 is as follows:

“Transmission Interface Circuit” **A Transmission circuit which connects a User’s System to the GB Transmission System at a Connection Point.**

The original aim of the definition was to isolate the assets for which compliance against the Licence Standards are to be assessed. Some respondents have queried whether the definition functions correctly, in particular at Connection Sites where National Grid owns the LV busbars.

In order to address this National Grid considers that a different approach is taken. The new approach rather than attempting to define assets based upon ownership instead defines the assets in relation to their technical function. The revised proposal is that a Transmission Interface Circuit be defined as:

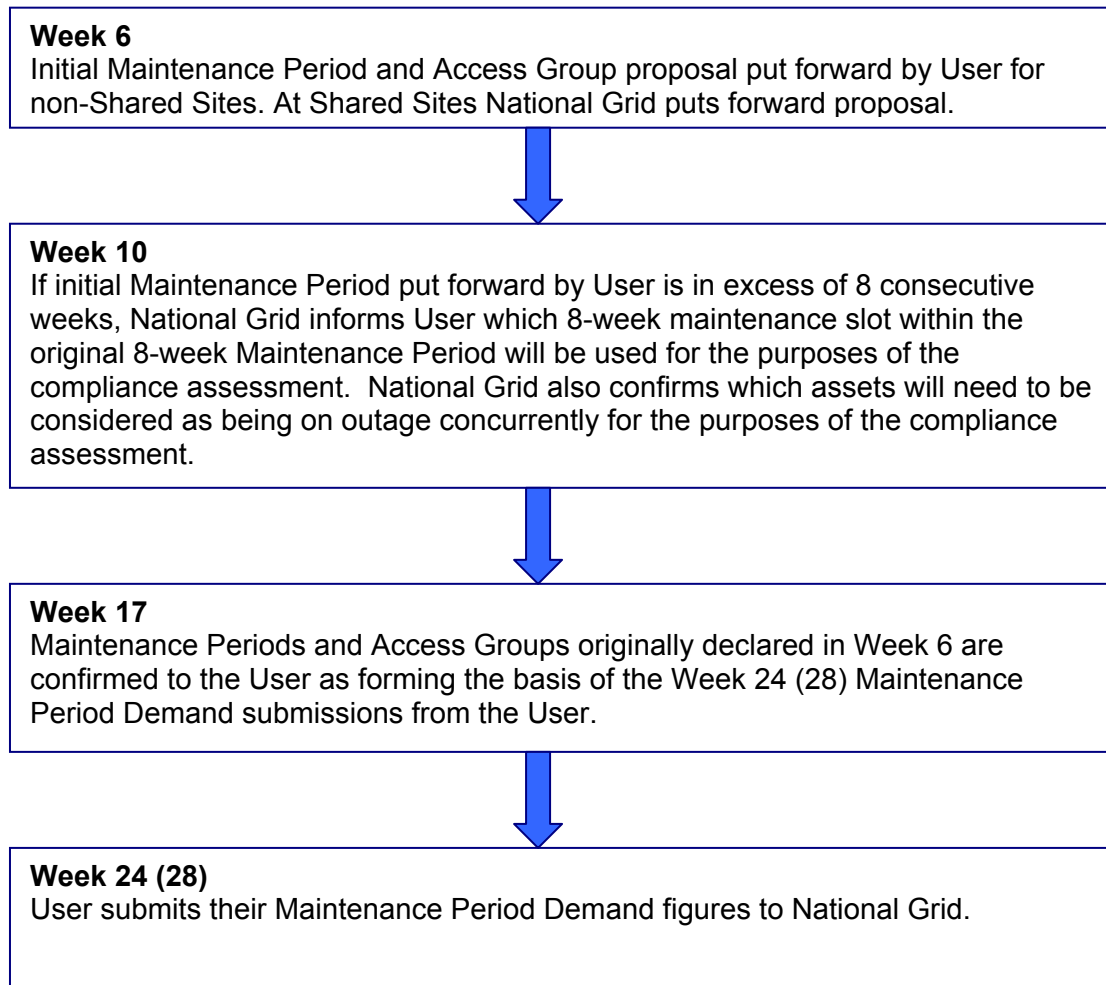
“Transmission Interface Circuit” In NGET’s Transmission Area, a Transmission circuit which connects a System operating at a voltage above 132kV to a System operating at a voltage of 132kV or below; and,

In SHETL’s Transmission Area and SPT’s Transmission Area, a Transmission circuit which connects a System operating at a voltage of 132kV or above to a System operating at a voltage below 132kV

It is hoped that by more clearly defining the interface in terms of the assets between transmission voltages and distribution voltages will more clearly isolate the circuits which are the subject of the compliance assessment under the licence standards.

Process for establishing Maintenance Periods

The process for establishing Maintenance Periods put forward in Grid Code consultation B/07 was as follows:



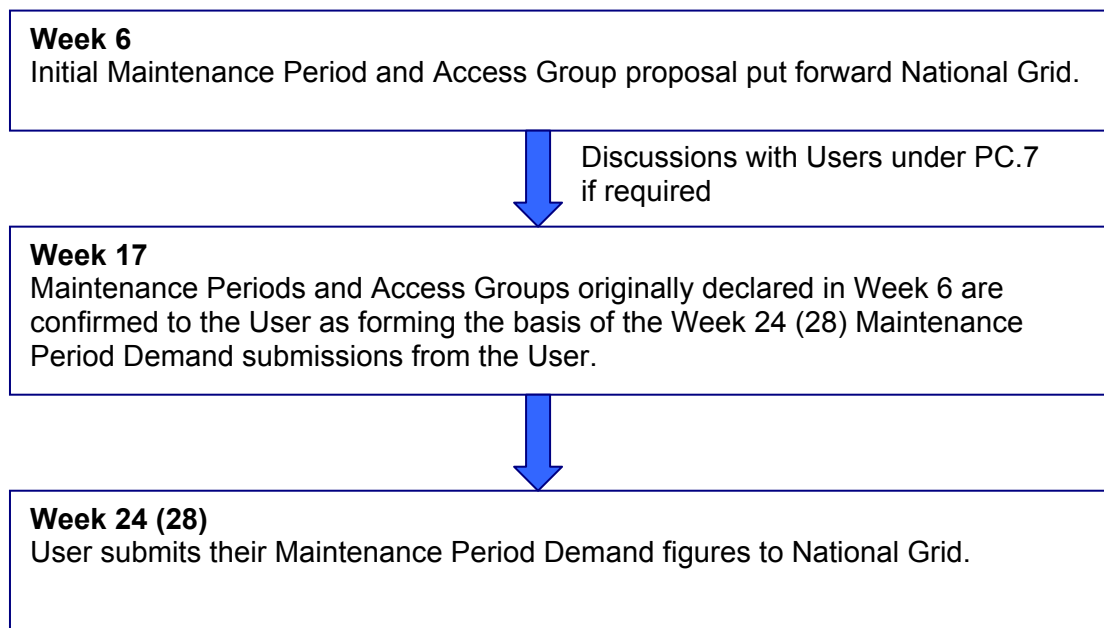
A number of comments were made upon this process with some respondents feeling that the process was in some cases inappropriate. The bulk of concerns surrounded:

- The fact that a User may not be in a position to identify the Maintenance Period by Week 6 even for non-Shared Sites and the fact that a User is expected to devise the Maintenance Periods in some User's views means that the User is expected to perform a GB SQSS compliance assessment.
- The fact that at Shared Sites National Grid would not be able to meet its Week 10 obligations as currently drafted regarding notification of assumed concurrent outages
- That the Week 10 process and the associated Maintenance Period and maintenance slot terminology is potentially confusing

Given respondent's concerns National Grid proposes a revised streamlined approach be taken in relation to the week 6 to week 17. The key features of this revised approach would be:

- The Week 6 process would now see National Grid put forward the initial Maintenance Period Proposal for all Sites. This Maintenance Period would now be a continuous period of 8-weeks between weeks 13 and 43.
- The Week 10 process would now be redundant and so is removed from the process.
- Following discussions with Users between week 6 and week 17 National Grid would then confirm the Maintenance Period for which a Maintenance Period is to be declared in Week 17.
- Users would submit their Maintenance Period Demands for the relevant Maintenance Periods in Week 24 (28).

In summary the process is therefore:



Changes to the Maintenance Period Definition

The existing definition of a Maintenance Period is as follows:

“Maintenance Period” A period of time in respect of which each Transmission Interface Circuit is to be assessed as whether or not it is capable of being maintained as derived in accordance with PC.A.4.1.4. The period shall commence and end on specified calendar weeks.

In addition to this further restrictions are placed upon the Maintenance Period in PC.A.4.1.4:

PC.A.4.1.4.3 The Maintenance Period shall be a minimum of 8 continuous weeks and can occur in any one of three maintenance years during the period from calendar week 13 to calendar week 43 (inclusive) in each year.

There were a number of queries by respondents to the consultation querying the 8-week duration of the Maintenance Period and whether this was too restrictive.

National Grid notes that in assessing compliance there is a balance that needs to be struck between the absolute minimum period needed to practically maintain assets on the transmission system and the need to retain a margin to allow for flexibility when actually planning outages. Though the compliance assessment does not actually plan outages, it does attempt to show that Transmission Interface Circuits are maintainable. As such an assumption has to be built into the length of the Maintenance Period to allow for the element of flexibility. It was on this methodology that the 8-week period was developed, giving a period of time in which all Transmission Interface Circuits could be maintained and still allow for a small “margin” such that when outages are operationally planned across the system (through a separate process) such a task remained feasible. The result of this was that an 8-week period was judged by National Grid to be most appropriate.

Given the comments received through the consultation and the desire to avoid any unnecessary reinforcement caused by a restrictive 8-week period National Grid believes that there is scope to allow for greater flexibility in the Maintenance Period. However although flexibility can be introduced National Grid continues to believe that an 8-week period during weeks 13 to 43 remains the most appropriate starting point for compliance assessment. However there are two mechanisms that could be used **only on occasions when it proves impossible to demonstrate compliance using 8-week Maintenance Periods:**

1. Allowing for the shortening of a Maintenance Period to less than eight continuous weeks, but in any event no less than 4 continuous weeks
2. Allowing Maintenance Periods to be declared in weeks 10-13 (inclusive).

The rationale behind each is that for certain assets who are demonstrably maintainable in a shorter period then a less than 8-week Maintenance Period may be appropriate. This would need to be considered on a case-by-case basis however with a shortening only being agreed following agreement between National Grid and the relevant User(s) and where demonstrating maintainability had already been found to be impossible for an Access Group using 8-week Maintenance Periods.

Secondly flexibility could be introduced by allowing Maintenance Periods to be scheduled in March. Outages are already routinely operationally planned in March which can be accommodated owing to the demand profile (by March the Darkness Peak is already being eroded through lighter evenings). However National Grid does not believe that there is scope to allow the Maintenance Period to be scheduled in November to February. Here the pattern of demand is much more onerous and daylight hours are shorter resulting in reduced working days at outdoor sites. There is also the impact of regulatory reliability schemes that National Grid is the subject of which require a fully available system through the November to February period. Assuming that outages can be planned in this period for the purposes of assessing GB SQSS compliance is therefore not feasible.

As a result of the above changes the following legal text changes are proposed to PC.A.4.1.4. (NB. Tracked Changes are shown from the consulted upon text)

PC.A.4.1.4 **Maintenance Periods and Access Groups**

PC.A.4.1.4.1 Each **Connection Point** must belong to one, and only one, **Access Group**.

PC.A.4.1.4.2 Each **Transmission Interface Circuit** must have a **Maintenance Period**.

PC.A.4.1.4.3 The **Maintenance Period** shall
(a) normally be a minimum of 8 continuous weeks and can occur in any one of three maintenance years during the period from calendar week 13 to calendar week 43 (inclusive) in each year ~~-, or;~~
(b) exceptionally and provided that agreement is reached between NGET and the relevant User(s), such agreement to be sought in accordance with PC.7, the Maintenance Period may be of a period of not less than 4 continuous weeks and can occur in any one of three maintenance years during the period from calendar week 10 to calendar week 43 (inclusive) in each year.

PC.A.4.1.4.4 ~~For Access Groups containing Connection Point(s) that solely supply the User's User System the User NGET shall submit in writing no later than calendar week 6 in each year:~~
~~(a) the calendar weeks defining its-the proposed start and finish of each Maintenance Period for each Transmission Interface Circuit;~~ and
~~(b) the Connection Points in each Access Group.~~
~~For all other Access Groups, NGET shall be responsible for submitting the information in (a) and (b) above to the relevant Users in Week 6.~~
Following the submission by ~~the User or NGET in-by~~ week 6 in each year and where required by either party, both **NGET** and the relevant **User(s)** shall use their reasonable endeavours to ~~meet to further discuss the appropriate week 6 submissions~~agree the appropriate Maintenance Period for each Transmission Interface Circuit prior to week 17 in each year.

PC.A.4.1.4.5 It is permitted for **Maintenance Periods** to overlap in the same **Access Group** and in the same maintenance year. However, ~~within each Maintenance Period an 8 week maintenance slot will be identified~~ where possible ~~that does~~ **Maintenance Periods will be sought by NGET that do** not overlap with any other ~~m~~**Maintenance slot Period** within that **Access Group** for each maintenance year. Where it is not possible to avoid overlapping ~~maintenance slots~~**Maintenance Periods**, **NGET** will indicate to **Users** ~~by in~~ calendar week ~~10-6~~ its initial view of which **Transmission Interface Circuits** will need to be considered out of service concurrently for the purpose of assessing compliance to **Licence Standards**.

PC.A.4.1.4.6 In exceptional circumstances, and with the agreement of all parties concerned, where a **Connection Point** is specified for the purpose of the **Planning Code** as electrically independent **Subtransmission Systems**, then data submissions can be on the basis of two (or more) individual **Connection Points**.

PC.A.4.2.2 No later than calendar week 17 each year **NGET** shall notify each **Network Operator** and **Non-Embedded Customer** in writing of the following, for the current **Financial Year** and for each of the following seven **Financial Years**, which in respect of a), b) and c) below will, until replaced by the following year's notification, be regarded as the relevant specified days and times under PC.A.4.2.1.

- a) the date and time of the annual peak of the **GB Transmission System Demand**; and
- b) the date and time of the annual minimum of the **GB Transmission System Demand**; and
- c) the relevant **Maintenance Period** for each **Transmission Interface Circuit** ~~(as submitted by the User pursuant to PC.A.4.1.4.4)~~; and
- d) Concurrent maintenance outage of two or more **Transmission Interface Circuits** (if any) that are situated in the same Access Group.

Amendments to PC.7 – Planning Liaison

PC.7 was proposed to be introduced into the Grid Code to give Users (Network Operators and Non Embedded Customers) additional clarity on the GB SQSS compliance assessment that is undertaken using the demand and network data provided by them under the Grid Code. This section also sets out the explicit requirement on Network Operators and Non Embedded Customers to consider submitting further data, amending previously submitted data or to not submit further data if National Grid identifies a potential compliance issue under the GB SQSS following the initial submission of data by Network Operators and Non Embedded Customers in Week 24 (28).

Some queries were raised through responses to the consultation on the proposed introduction of PC.7. These fell into two areas:

1. That the section should apply only to Network Operators and Non Embedded Customers only and not to Generators.
2. That the section potentially placed Network Operators into potential future “non-compliance” with the Grid Code through a process that they had little control over.

On the first point National Grid agrees with the sentiment that only Network Operators and Non Embedded Customers should be impacted by the changes put forward in this consultation and National Grid therefore proposes clarificatory changes to the text on PC.7.

On the second point National Grid again would propose further changes. It should be noted however that the Grid Code primarily sets out obligations on National Grid and Users whereas the compliance assessment against the Licence Standards is necessarily an iterative process that may or may not require certain actions to be taken at certain time by certain parties. This does not lend itself easily to the obligation based approach of the Grid Code. Therefore the overall approach taken for the revised drafting is to set out the definite obligations required prior to and including week 24 (28) in the Planning Code Appendix whereas PC.7 is used to define at a higher levels that changes to data and further assessment may be required following week 24 (28) data submissions in light of the assessments being undertaken by parties in line with the Licence Standards.

On this basis, changes are made to PC.7 to clarify that the Network Operator / Non Embedded Customer would **not** be placed into breach of Distribution Licence or Grid Code if a potential future “non-compliance” with the GB SQSS was identified. Here the potential to uncover potential future non-compliance is with the GB SQSS and as such the compliance issue is relevant only to National Grid and/or the Transmission Owners. However National Grid does agree that further flexibility needs to be built into the process to fully allow for a process of discussion and agreement of mitigating actions following Week 24 (28) submissions should GB SQSS compliance issues be identified. Here National Grid proposes that further detail is to be put into the PC.7 process to allow for this flexibility.

Overall then the changes that are to be made to the consulted upon version of PC.7 are as follows: (Tracked changes are from the consulted upon text.)

PC.7 PLANNING LIAISON

PC.7.1 This PC.7 applies to **NGET** and **Users**, which in PC.7 means:

- (a) **Network Operators**
- (b) **Non-Embedded Customers**

PC.7.12 As described in PC.2.1 (b) an objective of the **PC** is to provide for the supply of information to **NGET** from **Users** in order that planning and development of the **GB Transmission System** can be undertaken in accordance with the relevant **Licence Standards**.

PC.7.3 No later than calendar week 6 in the following calendar year **NGET** will provide information to **Users** regarding the results of any assessment that has been made by **NGET** since calendar week 24 of the current calendar year to verify whether **Connection Points** are compliant with the relevant **Licence Standards**.

PC.7.24 Where, in **NGET's** reasonable opinion, the data submitted by the **User** pursuant to this **PC** the result of any assessment identifies possible future non-compliance with the relevant **Licence Standards** **NGET** shall notify relevant **User(s)** of this fact as soon as reasonably practicable and shall agree with **Users** any opportunity to resubmit data to allow for a reassessment in accordance with PC.7.5.

PC.7.35 Following any notification by **NGET** to a **User** pursuant to PC.7.24 and following any further discussions ~~that held between~~ the **User** ~~may hold with~~ **NGET**, the **User** shall as soon as reasonably practicable either:

- (i) **National Grid** and the **User** may agree revisions to the **Maintenance Periods** for relevant **Transmission Interface Circuits**, such revisions shall not however permit a **Maintenance Period** to be less than 4 continuous weeks in duration or to occur other than between calendar weeks 10 and 43 (inclusive); and/or
- (ii) the **User** shall as soon as reasonably practicable
 - (a) submit further relevant data to **NGET** in accordance with this **PC**; and/or,
 - (b) modify data previously submitted to **NGET** in accordance with this **PC**; and/or
 - (c) notify **NGET** that it is the intention of the **User** to leave the data as originally submitted to **NGET** to stand as its submission.

PC.7.6 Where a **Maintenance Period** is amended pursuant to PC.7.5 (i) **NGET** shall notify the **The Authority** that it has been necessary to do so.

~~PC.7.7~~ When it is agreed that any resubmission of data is unlikely to confirm future compliance with the relevant **Licence Standards** For the avoidance of doubt the use of such data may identify the need for additional **Plant** and/or **Apparatus** to be installed by **NGET** and/or the **User** in order that **NGET** may continue to plan and develop the **GB Transmission System** in accordance with the relevant **Licence Standards** and in such cases then the **Modification** process in the **CUSC** may apply.

~~PC.7.48~~ Where the **User** can demonstrate (to **NGET's** reasonable satisfaction) that the **User** requires A **User** may at any time, in writing, request further specified **GB Transmission System** network data in order to provide **NGET** with viable **User** network data (as required under this **PC**), Upon receipt of such request, **NGET** shall consider any such request (which shall be made in writing) from the **User** and where appropriate, will provide such **GB Transmission System** data to such ~~at~~ the **User** as soon as reasonably practicable following the request.

Amendments to PC.A.4.5 – Post Fault User System Layout

In response to a User's reply that the additional clarity could be introduced into this clause we are proposing to amend the final sentence of PC.A.4.5.1. The aim of the change is to clarify the circumstances that apply to the declaration of a Post Fault User System Layout declaration. (Tracked changes are from the consulted upon version of the text.)

- PC.A.4.5.1 Where for the purposes of **NGET** assessing against the Licence Standards an **Access Group**, the **User** reasonably considers it appropriate that revised post fault **User System** layouts should be taken into account by **NGET**, the following information is required to be submitted by the **User**:
- i) the specified **Connection Point** assessment period (PC.A.4.3.1,(a)-(e)) that is being evaluated;
 - ii) an accurate and unambiguous description of the **Transmission Interface Circuits** considers to be switched out due to a fault;
 - iii) appropriate revised **Single Line Diagrams** and/or associated revised nodal **Demand** and circuit data detailing the revised **User System(s)** conditions;
 - iv) where the **User's** planned post fault action consists of more than one component, each component must be explicitly identified using the **Single Line Diagram** and associated nodal **Demand** and circuit data;
 - v) the arrangements for undertaking actions (eg the time taken, automatic or manual and any other appropriate information);.

The **User** must not submit any action that it does not ~~believe to be~~ feasibly achievable have the capability or the intention to implement during the assessment period specified (subject to there being no further unplanned outages on the **User's User System**).

**Appendix A: List of Non-Confidential Responses to Grid Code Consultation
B/07**

- CE Electric
- Central Networks
- EdF Networks
- Eon UK
- Magnox Electric
- RWE
- Scottish Power Transmission and Distribution
- SSE Power Distribution
- United Utilities
- Western Power Distribution